WHAT IS CLAIMED IS:

1. An image recorder optically scanning an image recording medium in a main scanning direction and a subscanning direction for recording an image on said image recording medium, comprising:

a light source emitting a first light beam;

a spatial light modulator dividing said first light beam into a plurality of second light beams arranged at least in said subscanning direction while modulating said plurality of second light beams in response to image signals;

a focusing optical system for focusing said plurality of second light beams on a recording medium; and

a main scanning system for scanning said recording medium with said plurality of second light beams in said main scanning direction, wherein

said plurality of second light beams constitute a plurality of beam subsets,

each beam subset consists of N adjacent light beams in said subscanning direction, where the number N is an integer of at least two, and

said plurality of light beams belonging to each said beam subset are modulated by an image signal for a single pixel so that each pixel on said recording medium is recorded by a single beam subset.

2. The image recorder according to claim 1, satisfying the following inequality:

$$La \leqq Lb \leqq (N \times La)$$

where La represents the size of a beam spot, formed by each second light beam on said recording medium, in said subscanning direction, and

Lb represents the size of said beam spot in said main scanning direction.

3. The image recorder according to claim 1, further comprising:

a numerical value changing element for changing the number N in response to light intensity required for image recording, and

a magnification changing element for changing a magnification of said focusing optical system in response to the number N changed by said numerical value changing element.

4. The image recorder according to claim 1, wherein

said spatial light modulator is a light valve with no discernible boundaries between adjacent modulating elements.

5. The image recorder according to claim 4, wherein

said light valve is the Grating Light Valve™.

6. An image recorder optically scanning an image recording medium in a main scanning direction and a subscanning direction for recording an image on said image recording medium, comprising:

a light source emitting a plurality of modulated light beams from a plurality of light emitting devices arranged in said subscanning direction;

a focusing optical system focusing said plurality of light beams on a recording medium; and

a main scanning system for scanning said recording medium with said plurality of light beams in said main scanning direction, wherein

said plurality of light beams constitute a plurality of beam subsets,

each beam subset consists of N adjacent light beams in said subscanning direction, where the number N is an integer of at least two, and

said plurality of light beams belonging to each beam subset are modulated by an image signal for a single pixel so that each pixel on said recording medium is recorded by a single beam subset.

7. The image recorder according to claim 5, satisfying the following inequality:

$$La \leqq Lb \leqq (N \times La)$$

where La represents the size of a beam spot, formed by each light beam on said recording medium, in said subscanning direction, and

Lb represents the size of said beam spot in said main scanning direction.

8. The image recorder according to claim 6, further comprising:

a numerical value changing element for changing the number N in response to light intensity required for image recording, and

a magnification changing element for changing a magnification of said focusing optical system in response to the number N changed by said numerical value changing element.

9. An image recorder for recording an image on an image recording medium, comprising:

a photo-generator generating a beam subset composed of a plurality of light beams subjected to a same modulation;

a focusing optical system focusing said beam subset on said image recording medium; and

a scanning mechanism scanning said image recording medium with said light beam set, wherein

said beam subset consists of said adjacent light beams, whereby said beam subset is used to image a single pixel on said image recording medium.